

中国竹亚科镰序竹属一新种——匍匐镰序竹

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Drepanostachyum stoloniforme S. H. Chen & Z. Z. Wang, a new species of Bambusoideae from China

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Abstract A new species of the genus *Drepanostachyum* Keng f. of Bambusoideae from China, *D. stoloniforme* S. H. Chen & Z. Z. Wang, which was found to grow in Xiamen Botanical Garden, Fujian Province, is described and illustrated. The new species is similar to *D. microphyllum* (Hsueh & Yi) Keng f. ex Yi, but differs by having distinctly thin liana, culm diameter 3–6 mm, culm wall 1 mm; 25–55 nodes in whole culm, internode of the basic culms 5–9 cm long, internode of the middle culms 13–18 cm long, joint of the node 1–2 mm long; the sheath tongue about 0.5 mm high, the cilium of the sheath tongue about 2 mm long; the ligula about 3 mm high, and the cilium of the ligula about 4 mm long; the small leaf 2–6 cm long and 0.3–0.6 cm wide in adult bamboo, and its secondary veins with 3–4 couplets.

Key words *Drepanostachyum*, *Drepanostachyum stoloniforme* S. H. Chen & Z. Z. Wang, Bambusoideae, new species, Xiamen, China.

摘要 报道了福建厦门园林植物园发现的中国竹亚科Bambusoideae镰序竹属一新种——匍匐镰序竹 *Drepanostachyum stoloniforme* S. H. Chen & Z. Z. Wang。该种与坝竹 *D. microphyllum* (Hsueh & Yi) Keng f. ex Yi 相似, 区别在于本种植株藤本状极明显, 竿匍匐状, 较细, 竿直径3–6 mm, 竿壁厚约1 mm; 全竿25–55节, 竿基部数节节间长5–9 cm, 中部节间长13–18 cm, 节内长1–2 mm; 箨舌高约0.5 mm, 具长约2 mm的纤毛; 叶舌高约3 mm, 具长约4 mm纤毛; 叶片较小, 在成竹时长2–6 cm, 宽0.3–0.6 cm, 叶片次脉3–4对。

关键词 镰序竹属; 匍匐镰序竹; 竹亚科; 新种; 厦门; 中国

作者于2004年2月前后在调查整理福建厦门地区竹类, 特别是厦门园林植物园建园40多年来引种栽培的竹类植物时, 采集制作了该园于1976年引自贵州的该竹类植物的具花标本。该植物栽植于厦门园林植物园标本楼庭院, 沙壤土, 水肥条件较好, 2004年2月见少量开花, 2005年3–4月大量开花, 4–5月结果(现存有竹苗), 10–11月母竹即枯死。作者原将该竹定为坝竹 *Drepanostachyum microphyllum* (Hsueh & Yi) Keng f. ex Yi, 并对其繁殖器官进行了补充描述(陈松河, 王振忠, 2004)。后来随着研究材料的丰富和研究工作的深入, 经仔细查对相关文献资料和核对近缘种标本, 发现该竹虽然与坝竹相似, 但其植株整体形态及竿、竿节、竿箨、叶、叶舌、叶鞘等特征均与后者有明显的区别, 其繁殖器官也与近缘竹种有明显区别。现根据其营养器官和生殖器官的特征确定该植物为镰序竹属 *Drepanostachyum* Keng f. 一新种。

匍匐镰序竹 新种 图1

Drepanostachyum stoloniforme S. H. Chen & Z. Z. Wang, sp. nov. Fig. 1

Species nova haec *Drepanostachyo microphylo* (Hsueh & Yi) Keng f. ex Yi affinis, sed stirpibus lianis simillimis, culmis stoloniformibus gracilibus 3–6 mm diam. 25–55-nodibus, parietibus circ. 1 mm crassis, internodiis basalibus 5–9 cm longis medianis 13–18 cm longis, intranodiis 1–2 mm longis, ligula vaginae circ. 0.5 mm alta apice ciliis circ. 2 mm longis oblecta; foliorum ligulis truncatis circ. 3 mm longis ciliis circ. 4 mm longis oblectis prope maturitatem 2–6 cm longis 0.3–0.6 cm latis, earum nervis secundariis 3–4-jugis differt.

Rhizoma sympodiale. Culmi lianis similes, 3–5 m longi, 3–6 mm diam., parietibus circ. 1 mm crassis, 25–55-nodes, internodiis basalibus 5–9 cm longis medianis 13–18 cm longis cylindricis viridulis vel flavo-virentibus primo leviter farinosis demum glabris nitidis; nodi vaginarum prominentes, residuis basium vaginarum instructi, glabri; nodi culmorum aliquanto prominentes, intranodiis 1–2 mm longis. Vaginae culmorum internodiis breviores, longe triangulatae, crasse papyraceae, cinereo-fulvae, apice 1–2 mm latae, dorso laeves, glabrae, conspicue longitudinaliter striatae, margine membranaceae; auriculae nullae; ligulae truncatae vel leviter recavae, circ. 0.5 mm altae, apice ciliis circ. 2 mm longis oblectae; laminae reflexae, subulatae vel lineari-lanceolatae, glabrae, basi rotundatae, apice acuminatae, margine involutae; rami ad quemque nodum 5–14 fasciculati, interdum ramus primarius 1 in numero, arrectus, culmis subaequicrassus, ramis lateralibus gracilioribus, circ. 0.4 mm diam., nodis ramorum et nodis vaginarum conspicuioribus, internodiis circ. 0.5 mm longis. Folia 3–10 in quoque ramulo; vaginae foliorum glabrae, 2–6 cm longae, margine tenues, purpurae; auriculae nullae; ligulae truncatae, circ. 3 mm longae, superne margine serrulatae et ciliatae, ciliis circ. 4 mm longis; laminae papyraceae, anguste lanceolatae, juventute 4–11 cm longae, 0.8–2 cm latae, maturitate 2–6 cm longae, 0.3–0.6 cm latae, superne virides, subtus viridulae, utrinque glabrae, apice acuminatae, basi attenuatae, nervis secundariis 3–4-jugis, nervillis transversis obscuris, margine serrulatae necnon scabrae; petioli 1–2 mm longi. Rami floriferi 100–200 cm longi, ad nodos denuo furcati; racemi vel paniculae simplices; rhaches graciles, undulato-flexuosae, 4–17 mm longae; bractae 2, chartaceae; spiculae 3–4-florae, virides, laxae, 12–15 mm longae; pedicellis gracilibus, undulato-flexuosis, longissimis 17–19 mm, ceteris 6–15 mm longis vel nullis; rhachillae articuli glabri, clavati, 1–2 mm longi, aliquanto compressi, apice inflati; glumae 2, membranaceae, 4–6 mm longae, prima 3–5-nervis, secunda 4–5-nervis; lemmata lanceolata, 7–11 mm longa, 3–4 mm lata, 7–9-nervia, glabra, apice acuminata; paleae 8–9 mm longae, 3–4 mm latae, dorso 2-carinatae, apice bifidae; lodiculae 3, ovatae, piliferae; stamina 3, 4–5 mm longa; ovarium longe ellipticum, glabrum, circ. 4 mm longum, breviter stipitatum; stylus brevis; stigmata 3, plumose. Caryopsis anguste oblonga, 1–1.2 cm longa, 2.5–2.7 mm diam., brunnea, pericarpio crassiore glabro 7–11-carinato, ventrali manifesta sutura basi acuta, apice styli basi persistente rostriformi instructo, albumine copioso albo. Martio et Aprili floret. Turiones Augusta crescentes.

China. Fujian (福建): Xiamen (厦门), Xiamen Botanical Garden (XMBG) (厦门园林植物园), alt. 110–200 m, 2004-02-18, S. H. Chen (陈松河) 2004-002 (holotype, PE; isotype, XMBG), 2004-02-20, S. H. Chen (陈松河) 2004-003 (XMBG).

地下茎合轴型。竿藤本状，丛生，长3–5 m。全竿具25–55节，基部数节节间长5–9 cm，中部节间长13–18 cm；直径3–6 mm；竿壁厚约1 mm；节间圆筒形，淡绿色或黄绿色，幼时微被白粉，老时无毛，有光泽；箨环隆起，具箨鞘基部的残留物，无毛；竿环稍隆起；节内长1–2 mm。箨鞘短于节间，长三角形，厚纸质，灰褐色，先端宽1–2 mm，背部光滑，无毛，纵脉纹明显，边缘膜质；箨耳无；箨舌截形或微下凹，高约0.5 mm，先端具长约2

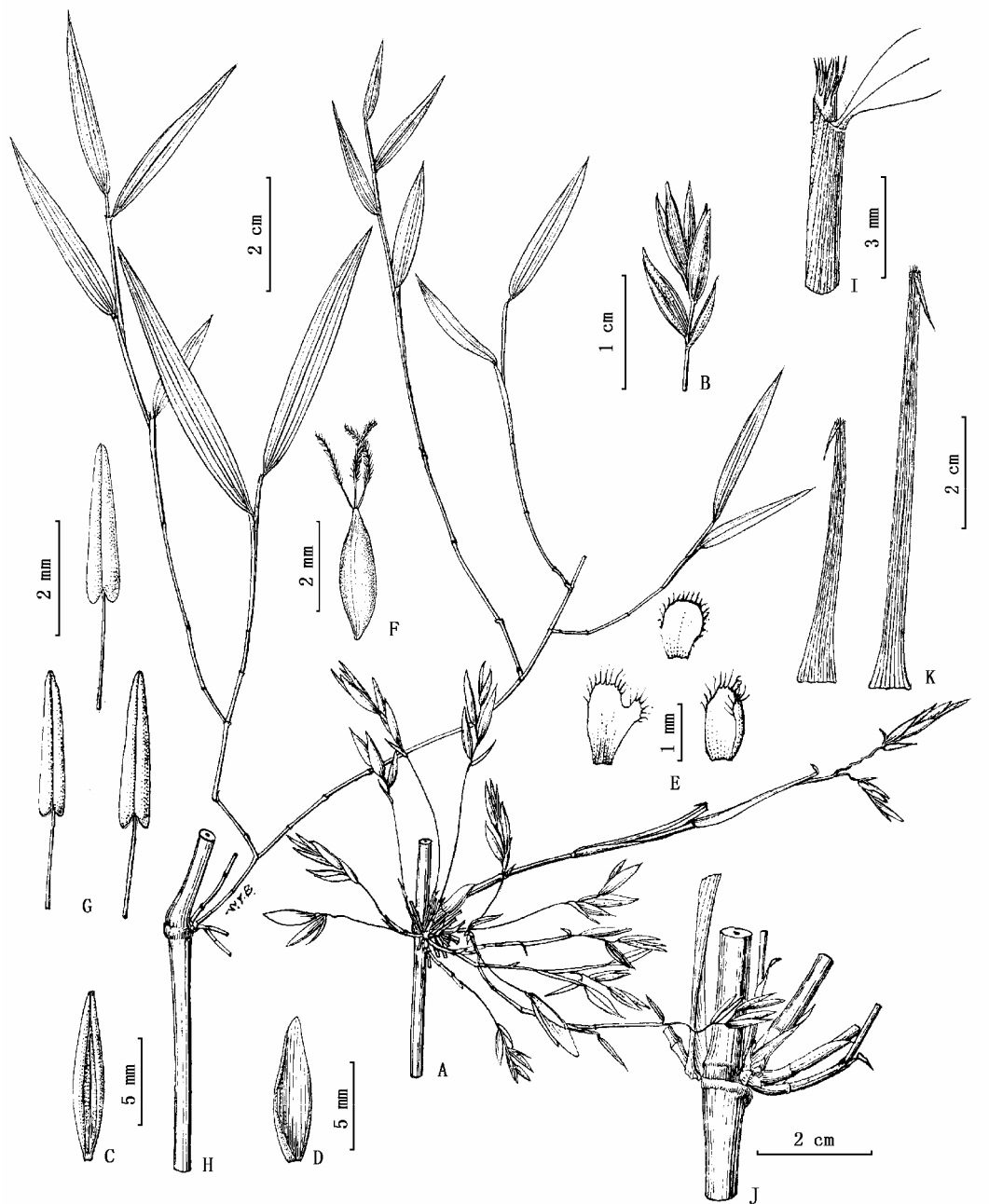


图1 匍匐镰序竹 A, 花枝的一部分; B, 小穗; C, 外稃; D, 内稃, 腹面观; E, 鳞被; F, 雌蕊; G, 雄蕊; H, 叶枝; I, 叶片局部放大, 示叶舌上的纤毛; J, 竿之一段, 示一主枝及多数纤细的小枝; K, 竿箨。(孙英宝根据陈松河2004-002号标本绘)

Fig. 1. *Drepanostachyum stoloniforme* S. H. Chen & Z. Z. Wang. A, a part of flowering branch; B, spikelet; C, lemma; D, palea abdomen; E, squama; F, pistil; G, stamen; H, branchlet with leaves; I, enlarged part leaf; J, a part of culm, showing its branching pattern; K, culm-sheath. Drawn by Y. B. SUN from S. H. Chen 2004-002.

mm的纤毛; 箨片外翻, 锥形或条状披针形, 无毛, 基部作圆弧形向内收窄, 先端渐尖, 边缘内卷; 竿每节簇生5–14枝, 有时具1枚较粗的主枝, 枝上举, 直径与主竿相近, 侧枝较细, 直径约0.4 mm, 枝环与箨环较明显, 侧枝节内长约0.5 mm。叶在每小枝有3–10枚, 叶鞘无毛, 长2–6 cm, 边缘质薄而略带紫色; 叶耳无; 叶舌截形, 高约3 mm, 上缘具细锯齿和长约4 mm的纤毛; 叶片纸质, 窄披针形, 在幼竹时长4–11 cm, 宽0.8–2 cm, 在成竹时长2–6 cm, 宽0.3–0.6 cm, 上面绿色, 下面淡绿色, 两面均无毛, 先端渐尖, 基部渐窄, 叶柄长1–2 mm, 次脉3–4对, 小横脉不明显, 叶缘具细锯齿而粗糙。花枝长100–200 cm, 节上可再分具花次生枝; 花序为总状花序或简单的圆锥花序; 花序轴较明显, 纤细而有波曲, 长4–17 mm; 基部托有2苞片, 纸质; 小穗含3–4朵小花, 绿色, 其排列较疏松, 长12–15 mm; 小穗有柄或无柄, 具柄的柄纤细, 呈毛发状, 有波曲, 其中一最长者达17–19 mm, 其余的长达6–15 mm; 小穗轴节间无毛, 呈棒状, 长1–2 mm, 体稍扁, 先端膨大作宽浅杯状; 颖2, 膜质, 长4–6 mm, 第一颖具3–5脉, 第二颖具4–5脉; 外稃呈披针形, 长7–11 mm, 宽3–4 mm, 7–9脉, 无毛, 先端渐尖; 内稃长8–9 mm, 宽3–4 mm, 背部具2脊, 先端浅二裂; 鳞被3, 卵形, 有毛, 紧贴子房基部; 雄蕊3, 长4–5 mm; 子房长椭圆形, 无毛, 长约4 mm, 具短柄; 花柱短, 柱头3, 呈毛刷状; 颖果为细狭的长圆形, 长1.0–1.2 cm, 直径2.5–2.7 mm, 棕褐色, 果皮较厚, 种皮无毛, 具7–11脊, 腹沟明显, 基部尖, 顶端残存有花柱基部形成的喙, 胚乳丰富、乳白色。花期3–4月。笋期8月。

本种与坝竹*D. microphyllum* (Hsueh & Yi) Keng f. ex Yi相似, 区别在于本种植株藤本状极明显, 竿匍匐状, 较细, 竿直径3–6 mm, 竿壁厚约1 mm; 全竿25–55节, 竿基部数节节间长5–9 cm, 中部节间长13–18 cm, 节内长1–2 mm; 箨舌高约0.5 mm, 具长约2 mm纤毛; 叶舌高约3 mm, 具长约4 mm纤毛; 叶片较小, 在成竹时长2–6 cm, 宽0.3–0.6 cm, 叶片次脉3–4对。易于区别。

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